Access to energy for all in rural areas in Africa
Progress and perspectives within the CLUB-ER:
The Experience of MOZAMBIQUE

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Sheraton Djibouti Hôtel, 26 November 2013
OVERVIEW OF MOZAMBIQUE ENERGY SECTOR:

- **Population:** 25.2 millions inhabitants

- 10 **provinces**, 128 **districts** of which more than 120 grid connected and 8 to be concluded in 2014.

- **Access rate to Energy:** 40% of which
  - 26% **through the national grid and**
  - 14% **off grid systems mainly solar systems (rural areas)**

- **Target:** all 128 districts electrified by national grid by 2014.

- **Country energy demand:** 1600 MW

- **Energy consumption: Main resources:** Hydro, Gas, Coal, Oil, renewable sources (solar, wind, geothermal, solid urban residues)
OVERVIEW OF MOZAMBIQUE ENERGY SECTOR:

KEY PLAYERS

- **Government of Mozambique/Ministry of Energy**: Police making and overall supervision of the electricity sector (National and Provincial Directorates of Energy-DPREME);

- **CNELEC/National Regulatory/advisory Board**

- **FUNAE**: Mainly involved with off-grid electrification using renewable energies

- **Electricidade de Moçambique (EDM)**: 100% owned by the State, with the responsibility to generate, transport, distribute and commercialize electricity throughout the country.

- **Hidroeléctrica de Cahora Bassa (HCB)**: an IPP owned by Mozambique Government (92.5%) and REN / Portugal (7.5%).

- **Moz Transmission Company (MOTRACO)**: an ITC, Owned by EDM, ESKOM and SEB, 33.33% each, responsible to supply electricity to MOZAL aluminum smelter in Mozambique and wheeling of power to EDM in Mozambique and SEC in Swaziland.
OVERVIEW OF MOZAMBIQUE ENERGY SECTOR: REGULATORY FRAMEWORK

- Energy Policy
- Energy Strategy
- Energy Law
- Renewable Energy Strategy
- Biofuel Policy
- Feed in Tariff regulation (sent to the cabinet for approval)
- Rural Electrification Strategic Plan
- PPP Strategy
OVERVIEW OF MOZAMBIQUE ENERGY SECTOR: RURAL ELECTRIFICATION

- **Main Player:** FUNAE, public institution created in July 1997.

- **Intervention areas:** Rural electrification
  - Solar photovoltaic systems
  - Mini Hydro
  - Biomass (improved cooking stoves and kilns)
  - Wind systems (water pumping)
  - Construction of fuel stations
More than 200 villages electrified using SPV systems (stand alone and centralized systems)

+ 500 schools (including teachers’ houses) and more than 500 clinics electrified (including nurses’ houses)

More than 3 million people with access to energy using off grid systems (14%)

Construction of 3 solar power plants (1.5 MW)

More than 45 fuel stations built

More than 40 thousands improved cooking stoves

3 mini hydro on final stage of construction and more than 8 pre and feasibility studies concluded for mini hydro projects
OVERVIEW OF MOZAMBIQUE ENERGY SECTOR: RURAL ELECTRIFICATION – Main Achievements

- Construction of solar panel factory
- Renewable energy atlas
- Feed in tariff
- O&M Strategy
- PS involvement strategy
- Engagement of donors (WB, Belgium, South Korea, Norway, EU, Japan, Dutch, India, Danish)
Involvement of the local leaders and community

Management Commissions

Payment of monthly fixed fee (25% remains in the community and 75% sent to FUNAE for future maintenance)

2 years after sales warranty period and after that supply spare parts.

Regular monitoring and awareness campaign (against theft, vandalism, misuse of systems)
OVERVIEW OF MOZAMBIQUE ENERGY SECTOR: RURAL ELECTRIFICATION – Challenges

- Diversification of the source of power by using the existing natural resources
- Engage private sector in energy sector
- Part of Natural gas shall be used for power generation in order to improve the quality of supply
- Coal must be part of the solution with possibility of transporting coal close to the load centre
- Built the back bone transmission line
Thanks for your attention

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